

WHAT IS CLAIMED IS:

1. An apparatus for threading a material web along a running path, comprising:
a guide extending at least partially along the running path;
a transporter adapted to travel along said guide;
a motor connected to at least one of said transporter and said guide; and
5 a clamp connected to said transporter, said clamp both movable and releasably attachable
with respect to the material web.
2. The apparatus of claim 1, wherein said motor is a linear motor which includes both
said guide as an electromagnetic rail and said transporter with at least one magnet.
3. The apparatus of claim 2, wherein said material web is a fiber web in a papermaking
machine.
4. The apparatus of claim 2, wherein said linear motor is one of a linear induction motor,
a linear synchronous motor, a romag motor, a claw-pole motor, a homopolar inductor motor, a
heteropolar inductor motor and a traklec motor.
5. The apparatus of claim 2, wherein said electromagnetic rail includes a plurality of
electromagnets.
6. The apparatus of claim 2, wherein said electromagnetic rail includes a plurality of
permanent magnets.

7. The apparatus of claim 2, wherein said electromagnetic rail forms an endless loop.
8. The apparatus of claim 2, wherein said electromagnetic rail includes a parking area for said transporter.
9. The apparatus of claim 8, further including a launching mechanism in said parking area.
10. The apparatus of claim 2, wherein said electromagnetic rail includes a bypass portion for said transporter.
11. The apparatus of claim 2, further including a plurality of supports extending along said electromagnetic rail.
12. The apparatus of claim 11, wherein said electromagnetic rail includes at least one rail beam connected to said plurality of supports.
13. The apparatus of claim 12, wherein said transporter includes a transporter frame adapted to move along said rail beam.
14. The apparatus of claim 12, wherein said transporter includes a plurality of wheels connected to said transporter frame, said wheels configured to roll along said rail beam.

15. The apparatus of claim 13, wherein said transporter frame and said rail beam include a plurality of levitation magnet pairs.

16. The apparatus of claim 2, wherein said transporter includes at least one electromagnet.

17. The apparatus of claim 2, wherein said magnet is an electromagnet.

18. The apparatus of claim 2, wherein said clamp includes both a fixed flexible clamping element and a pivotable flexible clamping element.

19. The apparatus of claim 18, wherein said clamp includes a roll connected to said pivotable flexible clamping element, said transporter includes a transporter frame, said transporter includes a resilient member connected to said pivotable flexible clamping element and said transporter frame.

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20. The apparatus of claim 19, further including at least one stationary wedge configured to mesh with said roll.

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21. The apparatus of claim 1, further including a cable connected to both said motor and said transporter.

22. The apparatus of claim 1, further including an adhesive strip connected to said transporter.

23. A machine for producing a material web, comprising:
at least one moving surface for both carrying and defining a running path of the material web;

a linear motor including:

5 an electromagnetic rail extending at least partially along the running path;

a transporter adapted to travel along said electromagnetic rail, said transporter including at least one magnet; and

a clamp connected to said transporter, said clamp both movable and releasably attachable with respect to the material web.

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24. The apparatus of claim 23, wherein said at least one moving surface is at least one of a belt, felt, wire, fabric, cylinder and roll.

25. The apparatus of claim 23, wherein said machine is a papermaking machine and said material web is a fiber web.

26. The machine of claim 23, wherein said linear motor is one of a linear induction motor, a linear synchronous motor, a romag motor, a claw-pole motor, a homopolar inductor motor, a heteropolar inductor motor and a traklec motor.

27. The machine of claim 23, wherein said electromagnetic rail includes a plurality of electromagnets.

28. The machine of claim 23, wherein said electromagnetic rail includes a plurality of permanent magnets.

29. The machine of claim 23, wherein said electromagnetic rail forms an endless loop.

30. The machine of claim 23, wherein said electromagnetic rail includes a parking area for said transporter.

31. The machine of claim 30, further including a launching mechanism in said parking area.

32. The machine of claim 23, wherein said electromagnetic rail includes a bypass portion for said transporter.

33. The machine of claim 23, further including a plurality of supports extending along said electromagnetic rail.

34. The machine of claim 33, wherein said electromagnetic rail includes at least one rail beam connected to said plurality of supports.

35. The machine of claim 34, wherein said transporter includes a transporter frame adapted to move along said rail beam.

36. The machine of claim 35, wherein said transporter includes a plurality of wheels connected to said transporter frame, said wheels configured to roll along said rail beam.

37. The machine of claim 35, wherein said transporter frame and said rail beam include a plurality of levitation magnet pairs.

38. The machine of claim 23, wherein said transporter includes at least one electromagnet.

39. The machine of claim 23, wherein said magnet is an electromagnet.

40. The machine of claim 23, wherein said clamp includes both a fixed flexible clamping element and a pivotable flexible clamping element.

41. The machine of claim 40, wherein said clamp includes a roll connected to said pivotable flexible clamping element, said transporter includes a transporter frame, said transporter includes a resilient member connected to said pivotable flexible clamping element and said transporter frame.

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42. The machine of claim 41, further including at least one stationary wedge configured to mesh with said roll.

43. The machine of claim 23, further including an adhesive strip connected to said transporter.

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44. A method for threading a material web, comprising the steps of:
- gripping a portion of the material web with a clamp;
- motivating said clamp and said portion of the material web at least partially along said running path using a linear motor, said linear motor including an electromagnetic rail and at least
- 5 one magnet; and
- transferring said portion of the material web to a delivery area.
45. The method of claim 44, wherein said portion of the material web is one of a tail, an edge strip and the material web.
46. The method of claim 44, wherein said material web is a fiber web in a papermaking machine.
47. The method of claim 44, wherein both said gripping step and said transferring step include meshing a roll of said transporter with a stationary wedge.
48. The method of claim 44, further including the step of launching said transporter prior to said gripping step.
49. The method of claim 44, wherein said motivating step includes sequential energization of said electromagnetic rail.

50. The method of claim 44, wherein said gripping step includes an adhesive strip
5 gripping the material web.